

1991-02

BUSM News & Notes: February 1991 no. 144

<https://hdl.handle.net/2144/20943>

Boston University



Boston University
School of Medicine

News & Notes

February 1991

Issue #144

Study by Small shows how to reduce fat in meat by more than half while cooking

Donald Small, M.D., director of the Biophysics Institute and chairman of the Department of Biophysics, has developed a simple technique that can be used at home to reduce the saturated fat content in meat by about 80 percent and the cholesterol content by half. According to Small, if this technique were widely used, it could lower the incidence of heart disease in the United States. The study was published in the Jan. 10 issue of *The New England Journal of Medicine*.

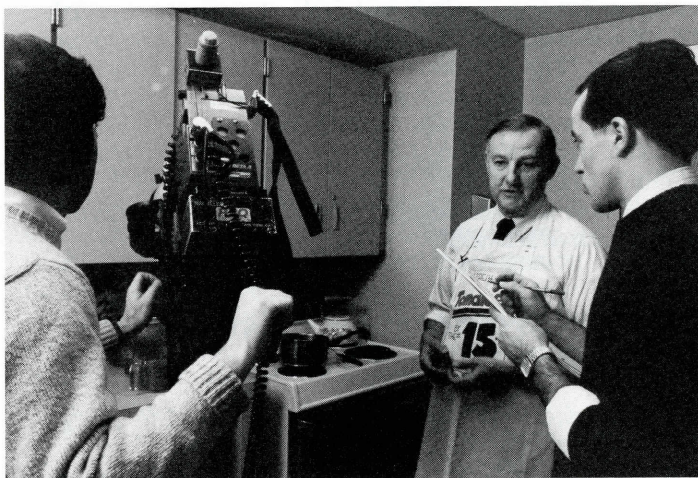
Small's technique involves stir-frying several pounds of ground beef in two pints of vegetable oil until the water in the meat begins to boil (at 212° F). After the meat is cooked for five minutes at this temperature, the meat and oil mixture are poured into a strainer and rinsed with several ounces of boiling water. The oil and watery broth, which passed through the strainer, are separated, and the fat-free broth is added back to the meat to restore its flavor.

Small decided to experiment with this technique based on his understanding of lipid chemistry and his desire to develop a method of reducing fat and cholesterol. He knew that cholesterol and saturated fats were soluble in vegetable oils and that this solubility increased as the temperature increased. According to Small, heating and stirring causes the vegetable oil to penetrate the meat, surround the muscle cells and absorb some of the saturated fat and cholesterol from the cell membranes. Rinsing the combination of meat and oil with boiling water prevents the oil from congealing and washes away the oil.

"This is certainly not a recommendation to eat more red meat," said Small. "However, for people who enjoy the taste of red meat and want to make it part of their diets, this is one way for them to get a healthier alternative."

BUSM researchers find trauma to the groin may lead to impotence

A School of Medicine study has shown that men who have suffered from blunt trauma to the groin—such as those that can occur from sports- or work-related injuries—may experience blockages to the arteries of the penis that result in impotence. The study, published in the *Journal of Urology*, is the first to document that men who develop immediate impotence following blunt trauma to the pelvis and crotch area had characteristic locations of blockages of the arteries to the penis. The BUSM researchers say such trauma also may be a risk factor for the future development of impotence and may be an important cause of impotence in younger men.



Donald Small, M.D., center, director of the Biophysics Institute and chairman of the Department of Biophysics, demonstrates to a television crew his technique for reducing the fat in meat. (photo by Lucy Milne, EMSC)

The researchers found similar patterns of localized artery blockages in 11 men who developed impotence several years after experiencing a crotch-area injury. Nine of these men also had other risk factors for impotence. "These findings suggest that blunt injury to the crotch may be a risk factor for the later development of impotence," said Irwin Goldstein, M.D., a professor of urology and the codirector of the New England Male Reproductive Center at the University Hospital.

Whitaker Cardiovascular Institute's SCOR grant renewed for \$7 million

The Whitaker Cardiovascular Institute's Specialized Center of Research (SCOR) for Hypertension recently received a five-year grant of \$7 million from the National Institutes of Health's National Heart, Lung and Blood Institute. The SCOR has been continuously funded since 1975, with total funding exceeding \$32 million during that period. It is the basic science component of the Cardiovascular Institute's National Research and Demonstration Center, the only one in the nation.

There are only six SCORs nationwide, each with a different focus. BUSM's SCOR is entitled "Cellular and Molecular Mechanisms in the Pathogenesis and Complications of Hypertension." The SCOR grant, which will provide funding through 1995, will support research investigating the changes in the arterial wall that hypertension induces, enhances or complicates.

The award comprises the following investigations: "Cardiovascular Effects of Chronic Bradykinin Inhibition," Haralambos Gavras, M.D., a professor of medicine, Irene Gavras, M.D., a clinical professor of medicine, and Margaret Bresnahan, D.Sc., an assistant research professor of medicine; "Relationship of Hypertension to Atherogenesis," Aram V. Chobanian, M.D., principal investigator of the grant and dean of BUSM, Peter Brecher, Ph.D., a professor of biochemistry and a research professor of medicine, Christian Haudenschild, M.D., a professor of pathology, and Riccardo Sarzani, M.D., an assistant research professor of medicine; "Mechanisms of Altered Arterial Reactivity in Hypertension," Richard A. Cohen, M.D., a professor of medicine, and Brecher; and "Molecular Mechanisms of Na,K-ATPase Regulation in Hypertension," Victoria Herrera, M.D., an assistant professor of medicine.

In addition, the grant supplies funds for three core units that support research activities.

BUSM holds conference to clarify meaning of 'right-to-die' ruling

The Law, Medicine and Ethics Program of Boston University held a conference on Dec. 7 to clarify the meaning and impact of the landmark ruling by the United States Supreme Court in the Nancy Cruzan case.

The United States Supreme Court upheld the decision of the Missouri Supreme Court not to remove a feeding tube from Nancy Cruzan—a comatose patient who had been in a permanent vegetative state for seven years. The justices based their decision on the fact that Cruzan had left no "clear and convincing evidence" of her wishes. This ruling gives states the power to decide when treatment can be refused, but it has caused confusion among physicians, patients and attorneys about how best to ensure patients' rights.

The BUSM conference, entitled "The Right to Die: Decision Making for the Elderly, Incapacitated and Incompetent Person, Ensuring Patients' Rights after Cruzan," educated citizens, providers, medical students, social workers and attorneys about the issues surrounding the right-to-die controversy.

"The right-to-die issue will continue to increase in importance as medical technology grows in its ability to sustain life and prolong dying," said Michael Grodin, M.D., a medical ethicist at the School of Public Health and one of the organizers of the conference. "This conference [was] an attempt to present an interdisciplinary and humanistic perspective on the issue."

An overview of Massachusetts law on the right-to-die issue and how that law will be affected by the Cruzan ruling was given by George Annas, J.D., M.P.H., a professor of health law at SPH and BUSM. Grodin outlined some of the medical and ethical issues that confront physicians as a result of this ruling, and Leonard Glantz, J.D., a professor of health law at SPH and BUSM, discussed the criteria used to determine if a person is competent to refuse treatment. In addition, Wendy Mariner, J.D., M.P.H., an associate professor of public health, discussed whether hospitals should establish policies concerning the right to die and what the elements of those policies should be.

Biophysics department receives NIH grants totalling nearly \$13 million for five years

The Department of Biophysics recently received three National Institutes of Health grants which will total nearly \$13 million over the next five years. The recipients of the grants, their areas of research and the total of their awards are:

Donald Small, M.D., chairman of the Department of Biophysics and the director of the Biophysics Institute, lipid physical chemistry in biology and pathology, \$11 million over five years; James A. Hamilton, Ph.D., an associate research professor of medicine and biochemistry, "Nuclear Magnetic Resonance Studies of Weakly Polar Lipids," \$900,000 over five years; and Christopher Akey, Ph.D., an assistant professor of biophysics, structural basis of nucleocytoplasmic transport, \$658,000 over three years.

Pharmacology department to host renowned geneticist as visiting professor

The Department of Pharmacology and Experimental Therapeutics has been honored with an award from the Burroughs Wellcome Fund to host Sydney Brenner, Ph.D., as Wellcome Visiting Professor in the Basic Medical Sciences. The award is made through the Federation of American Societies for Experimental Biology.

Brenner, director of the Molecular Genetics Unit of the Medical Research Council in Cambridge, England, is renowned for his pioneering studies on elucidation of the genetic code and genome mapping. A fellow of the Royal Society, Brenner has received numerous honors and awards, including the Albert Lasker Medical Research Award and the Kyoto Prize.

Brenner will be at the School of Medicine from March 13 to March 15. His major address, the Wellcome Lecture, will take place on Wednesday, March 13, at 4 p.m. in the Keefer Auditorium, and is entitled "The Human Gene Kit." In addition, he will present a seminar, "The Evolution of Genes and Proteins," on Friday, March 15, at 2:30 p.m. in the Instructional Building room 110 (L-110). During his visit at the School, Brenner will be meeting with faculty and students for research discussions. For more information, contact Carol T. Walsh, Ph.D., Department of Pharmacology and Experimental Therapeutics, at 638-4326 (x4326).

Whitaker Health Sciences Fund to cease support of collaborative research grants

At its meeting on Oct. 10, the Board of Directors of the Whitaker Health Sciences Fund voted to terminate support of collaborative research grants between the faculties at the Massachusetts Institute of Technology and at the three Boston medical schools in the area of life sciences and bioengineering, effective July 1, 1991. The decision to cease funding the Whitaker Health Sciences Fund, which was established 17 years ago, was based upon



The YMCA hosted a dinner in honor of the Black Achievers from the Boston area on Jan. 22 at the Marriott Copley. Attending were Black Achievers from the Medical Campus, including, from left, Precious Crawford, D.M.D., D.D.S., a clinical instructor in periodontology, Goldman School of Graduate Dentistry; Deborah Varrs, purchasing department, BUSM; Jennifer Furlonge, administrative supervisor, Evans Medical Group; John Rich, M.D., an assistant professor of medicine; Selma Morris, M.Ed., a nurse educator, SPH; Malissia Evans, an administrative secretary, SPH; Angela Kankam, records administrator, BUSM; and Judith Canada, an administrative assistant, GSGD. Not pictured but also honored as a 1990 Black Achiever from the School of Medicine was B. Andre Quamina, M.D., a clinical instructor in ophthalmology. (photo by Rose Marston)

the desire of The Whitaker Foundation to exclusively support biomedical engineering and no longer to provide research funds for both the life sciences and bioengineering.

O'Keane receives William Stokes Award

J. Conor O'Keane, M.D., a research fellow at the School of Medicine's Mallory Institute of Pathology, recently was awarded the 1990 William Stokes Award by the Royal College of Physicians of Ireland. O'Keane was recognized for his research proposal to develop a new *in-vitro* model to study colorectal adenomas—the precursor of colon cancer. It is the second time in three years that a researcher from the Mallory has received this award.

The award is presented in honor of William Stokes, M.D., one of an eminent group of 19th-century Irish physicians who made Dublin the leading center of clinical medicine in Europe in the mid-1800's. The Royal College of Physicians in Ireland is the body that governs postgraduate internal medicine in Ireland.

Book by Peters published

The Fine Structure of the Nervous System, written in part by Alan Peters, Ph.D., the Waterhouse Professor of Anatomy and chairman of the Department of Anatomy and Neurobiology, recently was published in its third edition. Also contributing to the book were Sanford L. Palay, M.D., the Bullard Professor of

Neuroanatomy *emeritus* at Harvard Medical School, and Henry de F. Webster, M.D., chief of the Laboratory of Experimental Neuropathology at the National Institute of Neurological Diseases and Stroke.

This new edition of the text, published by the Oxford University Press, provides revised and updated information about research in such areas as neuroimmunology and pathway tracing. The text includes an historical overview of the field of neuroscience and examines the structures of specific components of the nerve cell and various supporting cells.

AHPA honors Mason

The Arthritis Health Professions Association (AHPA) recently presented John Hayes Mason, Ph.D., senior socio-medical research associate with the School's Arthritis Center, with the 1990 AHPA Addie Thomas Service Award in recognition of his contributions to the arthritis community.

A former president of AHPA, Mason has been active in the arthritis community for more than 10 years. He has conducted research into the effects of arthritis and has advanced knowledge about arthritis diseases.

AHPA is the professional section of the Arthritis Foundation, which supports research to find the cure for and prevention of arthritis, and seeks to improve the quality of life for those affected by the disease.

Buckley '58 awarded BU alumni award

Mortimer Buckley '58 was one of six Boston University alumni who received 1990 Alumni Awards during Homecoming weekend this past fall. A renowned cardiovascular surgeon, Buckley is chief of the cardiac surgical unit at Massachusetts General Hospital and a professor of surgery at Harvard Medical School. He also serves as vice president of the American Heart Association Massachusetts Affiliate and chairperson of the Inter-Society Commission for Heart Disease Resources Cardiac Review Panel and the American College of Cardiology Cardiovascular Surgery Council. In 1982, Buckley received the School of Medicine's Distinguished Alumnus Award.

Alumni phonathon scheduled for March 4

The annual Spring Phonathon sponsored by the BUSM Alumni Association will be held on Monday, March 4, on the fifth floor of the George Sherman Union at the Charles River Campus, beginning at 5:30 p.m. The phonathon provides an opportunity for volunteers to contact BUSM alumni to ask for their support for the Annual Fund. The money raised for the Annual Fund will support the Student Revolving Loan Fund, the Alumni Medical Library and a variety of student activities.

To volunteer to be a phonathon caller, contact Mary Hopkins in the Alumni Office, Instructional Building room 120 (L-120), 638-5150 (x5150).

Briefly noted

Laurence H. Miller, M.D., an associate clinical professor of psychiatry and director of the Division of Psychiatry at Boston City Hospital, has been awarded a grant for Clinical Training in Alcohol and Other Drug Abuse from the National Institute on Alcohol Abuse and Alcoholism....**Dennis Crawford, BUSM III**, and **Leslie Cunningham, BUSM II**, have received American Heart Association medical student research fellowships, which will allow them to suspend their medical education for one year of basic science research. Both students are focusing on cardiovascular research....**Richard H. Egdahl, M.D.**, director of BUMC, moderated a symposium on "Innovations in Purchasing Health Care," sponsored by Massachusetts Health Data Consortium, Inc., on Dec. 18.

Upcoming CME courses

The following is a list of upcoming courses sponsored by the Department of Continuing Medical Education:

"Security for Our Future—The Role of Life Care in Housing, Hospitality and Health Care" will be held on April 11-12 at the Marriott Long Wharf Hotel in Boston.

"An In-Depth Review of What's New in Osteoporosis" will be offered on April 12, and again on April 19. Both sessions will be held at the APMG Peat Marwick Executive Conference Center in New York, N.Y.

A course on **"Advanced Trauma Life Support"** will take place at the Medical Center on April 18-19.

"Current Clinical Pediatrics" will be the subject of a conference to be held on April 22-26 at the Mariner's Inn on Hilton Head, S.C.

For further information, contact the Department of Continuing Medical Education, 80 E. Concord St., Boston, MA 02118, or call (617) 638-4605 (x4605).

News & Notes is a publication of the Office of Publication Services. If you have news of interest to the BUSM community, please contact Angela Sullivan, x8482 (638-8482) or write to her at the Office of Publication Services, 80 East Concord Street, Robinson 7 (B-7), Boston, MA 02118.

News & Notes

Boston University School of Medicine
Office of Publication Services
80 East Concord Street
Robinson 7 (B-7)
Boston, MA 02118

Non profit org.
U.S. Postage
PAID
Boston, Mass.
Permit No. 53312

BEATTIE, EMILY L
MED LIBRARY
80 E.CONCORD ST L12 MED45